Fig. 1

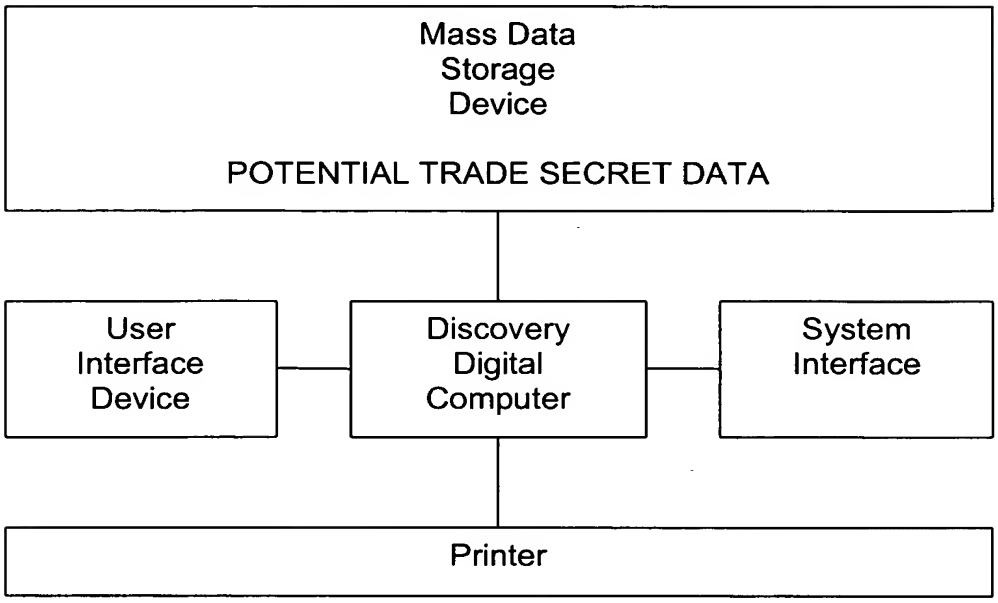

Mass Data Storage Device
POTENTIAL TRADE SECRET DATA
User Interface Device
Discovery Digital Computer
System Interface
Printer

Fig. 2

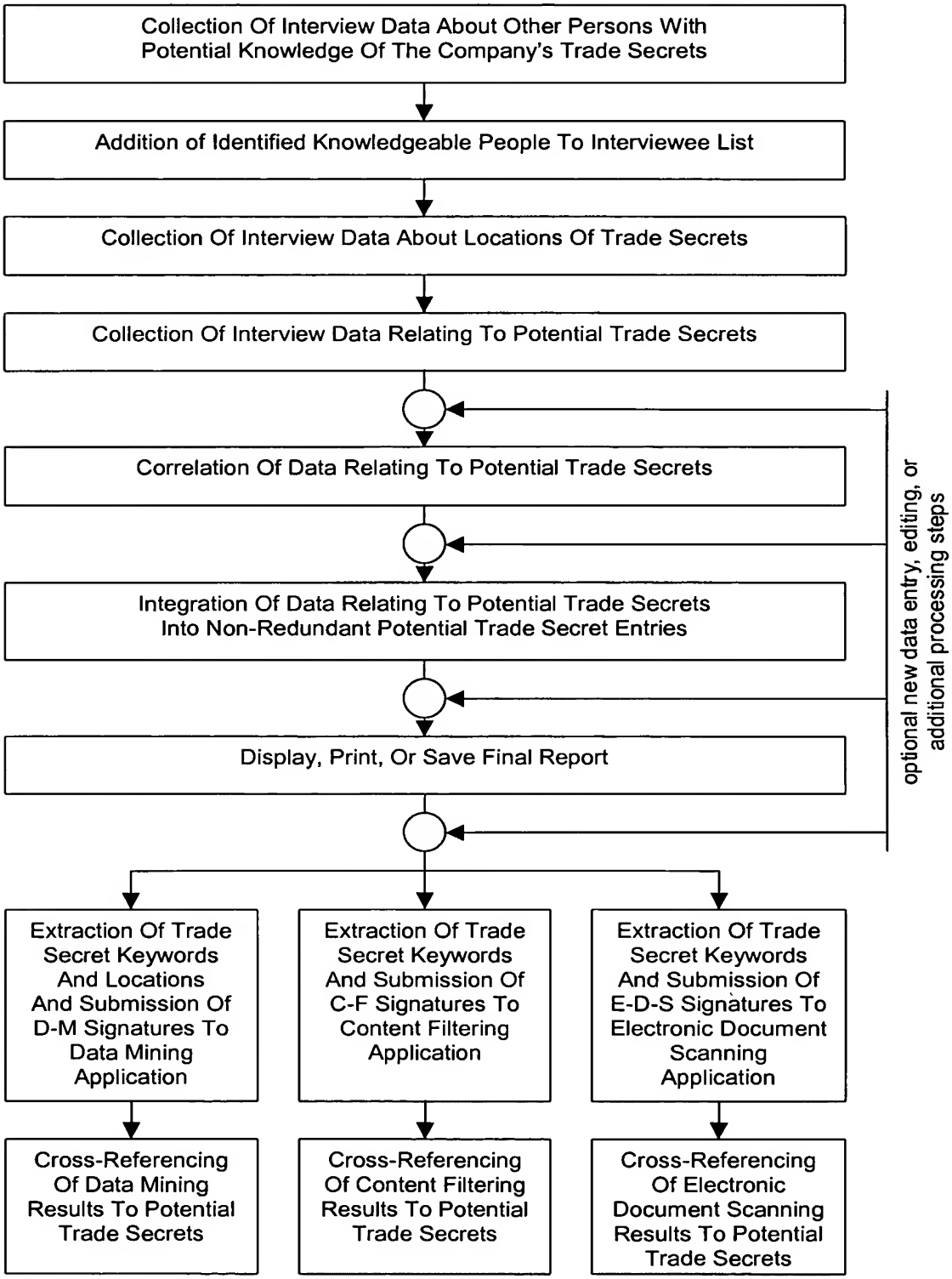

Collection Of Interview Data About Other Persons With Potential Knowledge Of The Company's Trade Secrets
Addition of Identified Knowledgeable People To Interviewee List
Collection Of Interview Data About Locations Of Trade Secrets
Collection Of Interview Data Relating To Potential Trade Secrets
Correlation Of Data Relating To Potential Trade Secrets
Integration Of Data Relating To Potential Trade Secrets Into Non-Redundant Potential Trade Secret Entries
Display, Print, Or Save Final Report
optional new data entry, editing, or additional processing steps
Extraction Of Trade Secret Keywords And Locations And Submission Of D-M Signatures To Data Mining Application
Extraction Of Trade Secret Keywords And Submission Of C-F Signatures To Content Filtering Application
Extraction Of Trade Secret Keywords And Submission Of E-D-S Signatures To Electronic Document Scanning Application
Cross-Referencing Of Data Mining Results To Potential Trade Secrets
Cross-Referencing Of Content Filtering Results To Potential Trade Secrets
Cross-Referencing Of Electronic Document Scanning Results To Potential Trade Secrets

Fig. 3

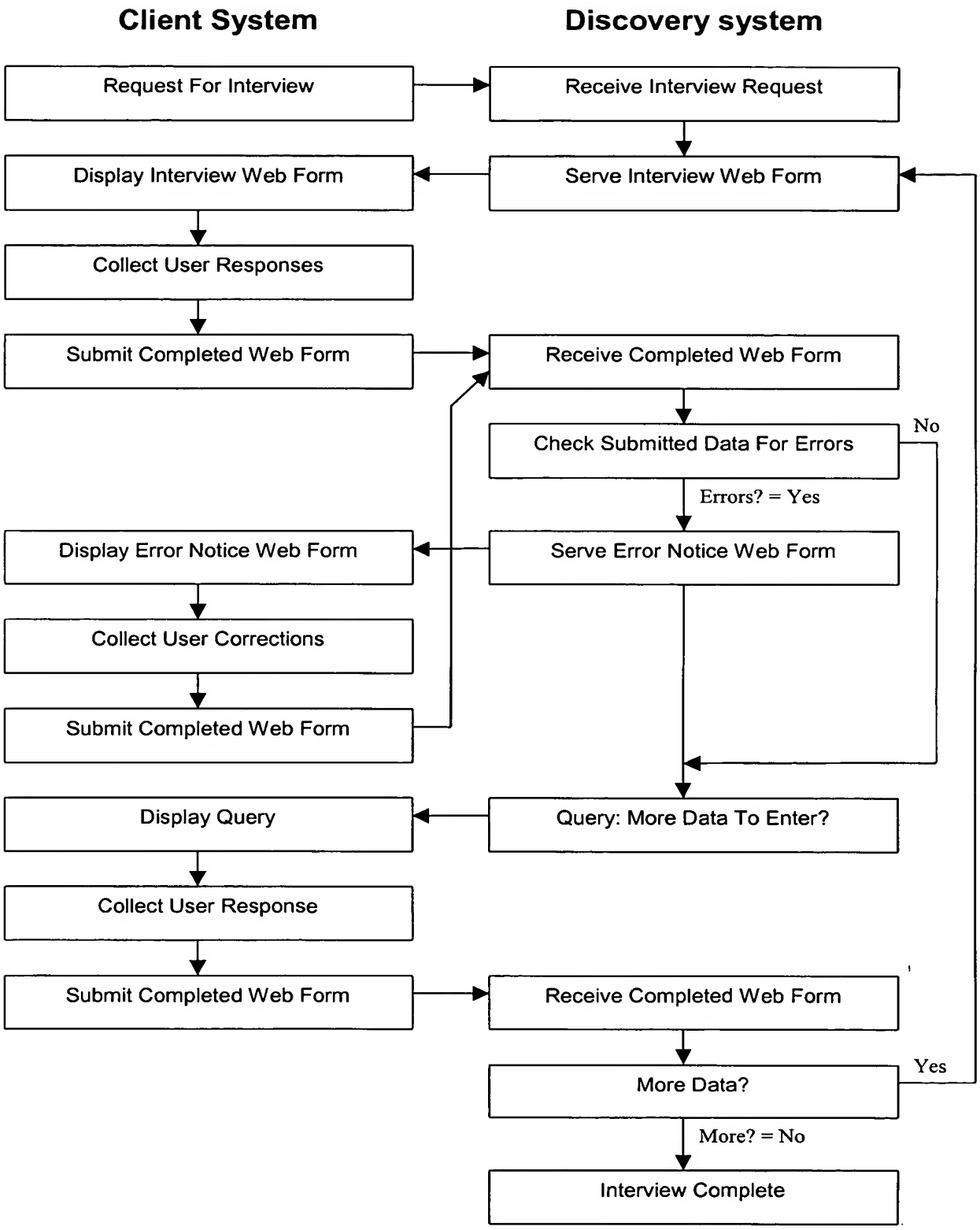

Client System
Discovery system
Request For Interview
Receive Interview Request
Display Interview Web Form
Serve Interview Web Form
Collect User Responses
Submit Completed Web Form
Receive Completed Web Form
Check Submitted Data For Errors
No
Errors? = Yes
Display Error Notice Web Form
Serve Error Notice Web Form
Collect User Corrections
Submit Completed Web Form
Display Query
Query: More Data To Enter?
Collect User Response
Submit Completed Web Form
Receive Completed Web Form
More Data?
Yes
More? = No
Interview Complete

Fig. 4

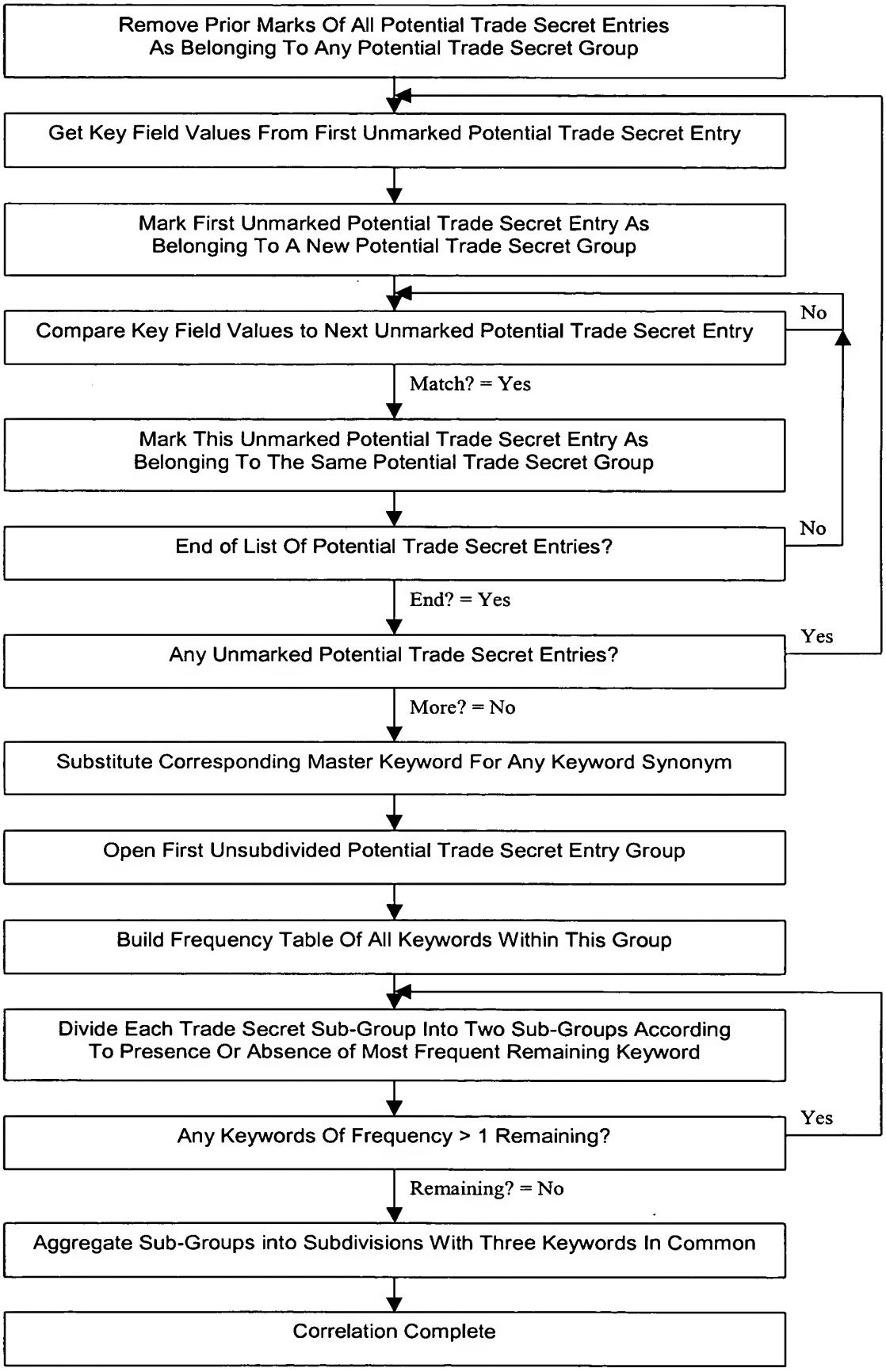

Remove Prior Marks Of All Potential Trade Secret Entries As Belonging To Any Potential Trade Secret Group
Get Key Field Values From First Unmarked Potential Trade Secret Entry
Mark First Unmarked Potential Trade Secret Entry As Belonging To A New Potential Trade Secret Group
Compare Key Field Values to Next Unmarked Potential Trade Secret Entry
No
Match? = Yes
Mark This Unmarked Potential Trade Secret Entry As Belonging To The Same Potential Trade Secret Group
End of List Of Potential Trade Secret Entries?
No
End? = Yes
Any Unmarked Potential Trade Secret Entries?
Yes
More? = No
Substitute Corresponding Master Keyword For Any Keyword Synonym
Open First Unsubdivided Potential Trade Secret Entry Group
Build Frequency Table Of All Keywords Within This Group
Divide Each Trade Secret Sub-Group Into Two Sub-Groups According To Presence Or Absence of Most Frequent Remaining Keyword
Any Keywords Of Frequency > 1 Remaining?
Yes
Remaining? = No
Aggregate Sub-Groups into Subdivisions With Three Keywords In Common
Correlation Complete

Fig. 5

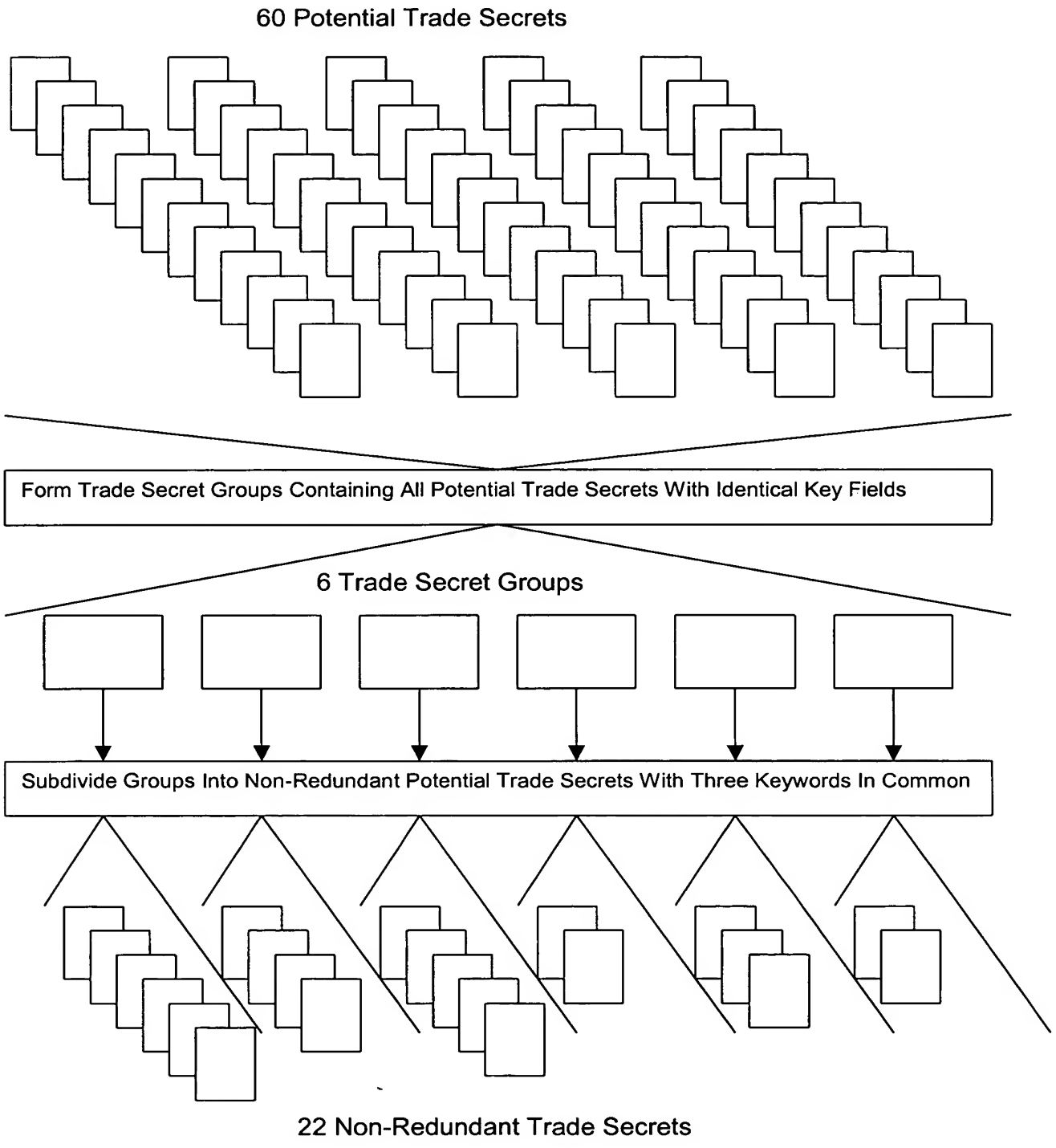

60 Potential Trade Secrets
Form Trade Secret Groups Containing All Potential Trade Secrets With Identical Key Fields
6 Trade Secret Groups
Subdivide Groups Into Non-Redundant Potential Trade Secrets With Three Keywords In Common
22 Non-Redundant Trade Secrets

Fig. 6

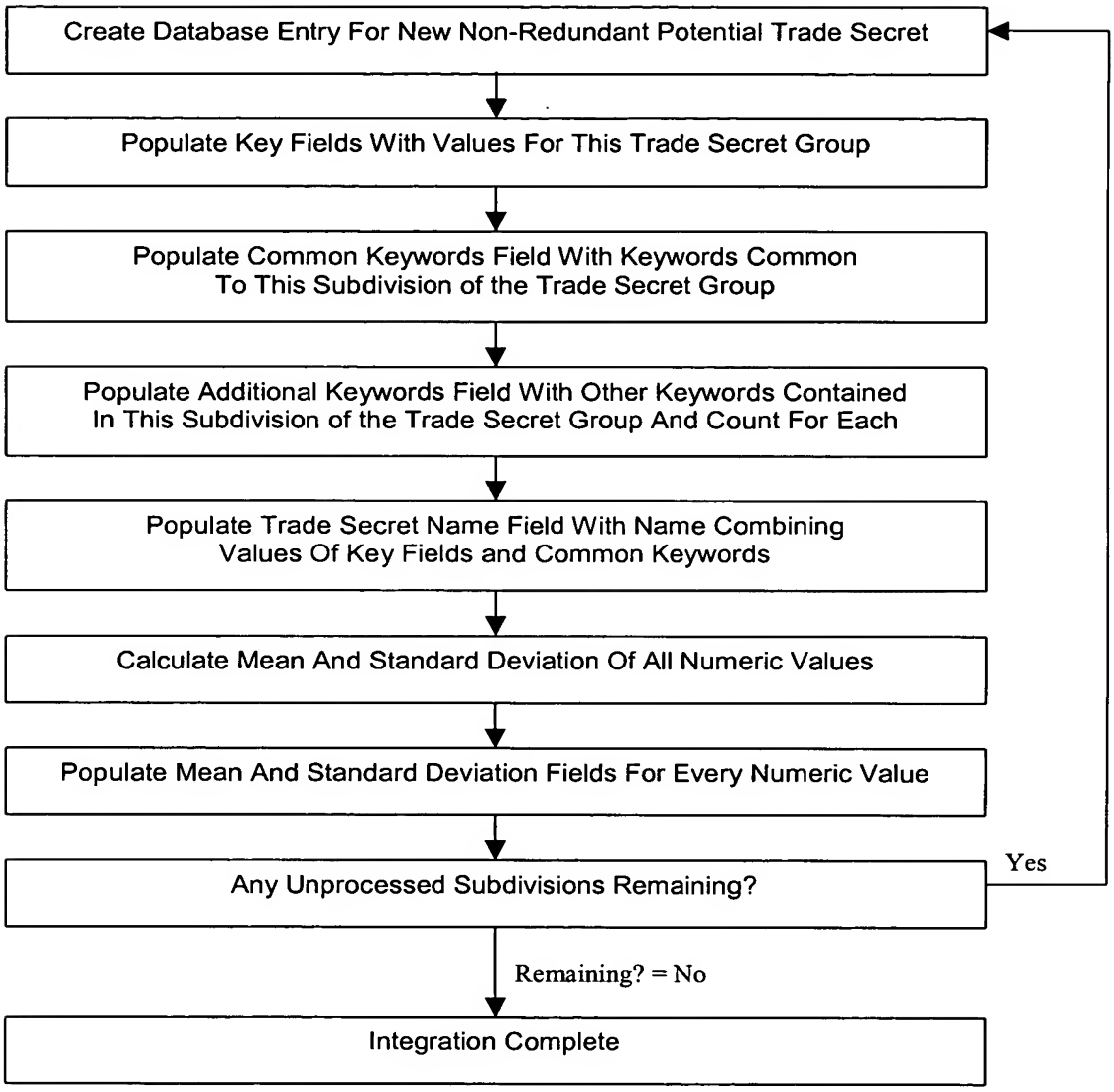

Create Database Entry For New Non-Redundant Potential Trade Secret
Populate Key Fields With Values For This Trade Secret Group
Populate Common Keywords Field With Keywords Common To This Subdivision of the Trade Secret Group
Populate Additional Keywords Field With Other Keywords Contained In This Subdivision of the Trade Secret Group And Count For Each
Populate Trade Secret Name Field With Name Combining Values Of Key Fields and Common Keywords
Calculate Mean And Standard Deviation Of All Numeric Values
Populate Mean And Standard Deviation Fields For Every Numeric Value
Any Unprocessed Subdivisions Remaining?
Yes
Remaining? = No
Integration Complete

Fig. 7

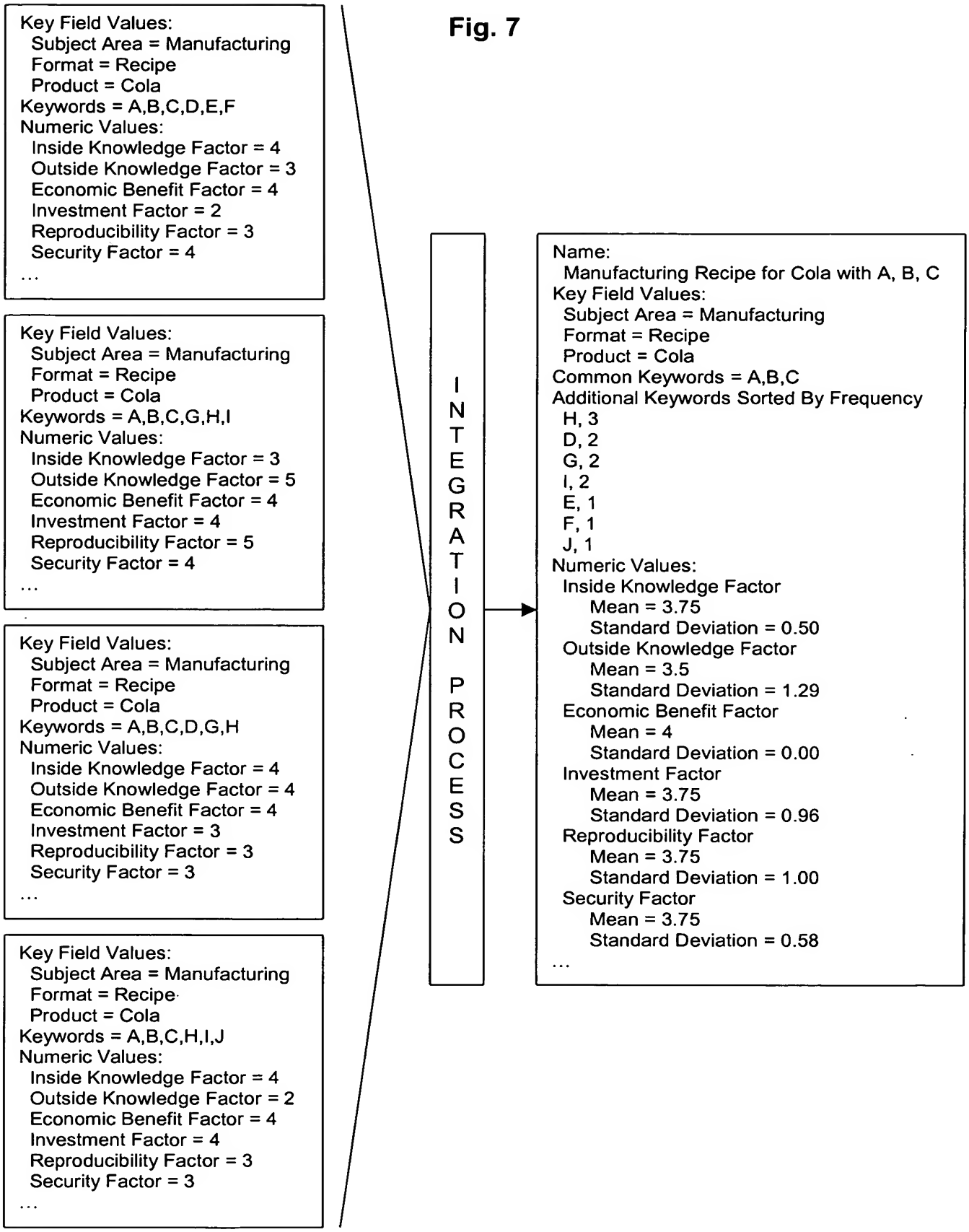

Key Field Values:
Subject Area = Manufacturing
Format = Recipe
Product = Cola
Keywords = A,B,C,D,E,F
Numeric Values:
Inside Knowledge Factor = 4
Outside Knowledge Factor = 3
Economic Benefit Factor = 4
Investment Factor = 2
Reproducibility Factor = 3
Security Factor = 4
...
Key Field Values:
Subject Area = Manufacturing
Format = Recipe
Product = Cola
Keywords = A,B,C,G,H,I
Numeric Values:
Inside Knowledge Factor = 3
Outside Knowledge Factor = 5
Economic Benefit Factor = 4
Investment Factor = 4
Reproducibility Factor = 5
Security Factor = 4
...
Key Field Values:
Subject Area = Manufacturing
Format = Recipe
Product = Cola
Keywords = A,B,C,D,G,H
Numeric Values:
Inside Knowledge Factor = 4
Outside Knowledge Factor = 4
Economic Benefit Factor = 4
Investment Factor = 3
Reproducibility Factor = 3
Security Factor = 3
...
Key Field Values:
Subject Area = Manufacturing
Format = Recipe
Product = Cola
Keywords = A,B,C,H,I,J
Numeric Values:
Inside Knowledge Factor = 4
Outside Knowledge Factor = 2
Economic Benefit Factor = 4
Investment Factor = 4
Reproducibility Factor = 3
Security Factor = 3
...
INTEGRATION PROCESS
Name:
Manufacturing Recipe for Cola with A, B, C
Key Field Values:
Subject Area = Manufacturing
Format = Recipe
Product = Cola
Common Keywords = A,B,C
Additional Keywords Sorted By Frequency
H, 3
D, 2
G, 2
I, 2
E, 1
F, 1
J, 1
Numeric Values:
Inside Knowledge Factor
Mean = 3.75
Standard Deviation = 0.50
Outside Knowledge Factor
Mean = 3.5
Standard Deviation = 1.29
Economic Benefit Factor
Mean = 4
Standard Deviation = 0.00
Investment Factor
Mean = 3.75
Standard Deviation = 0.96
Reproducibility Factor
Mean = 3.75
Standard Deviation = 1.00
Security Factor
Mean = 3.75
Standard Deviation = 0.58
...

Fig. 8

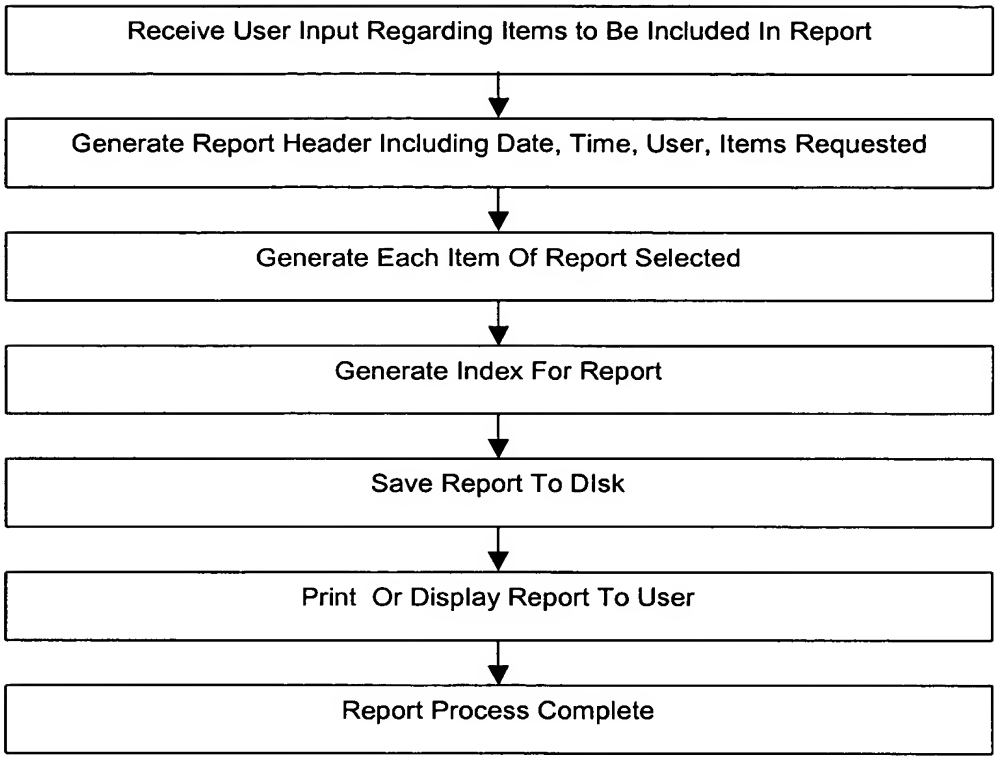

Receive User Input Regarding Items to Be Included In Report
Generate Report Header Including Date, Time, User, Items Requested
Generate Each Item Of Report Selected
Generate Index For Report
Save Report To DIsk
Print Or Display Report To User
Report Process Complete

Fig. 9

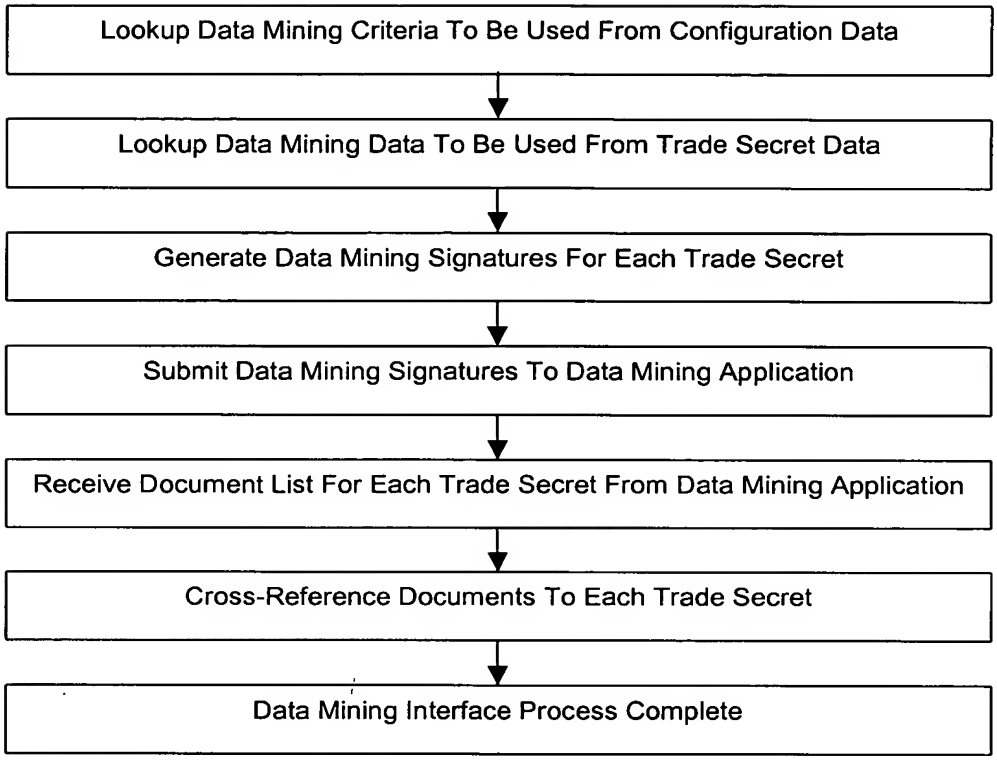

Lookup Data Mining Criteria To Be Used From Configuration Data
Lookup Data Mining Data To Be Used From Trade Secret Data
Generate Data Mining Signatures For Each Trade Secret
Submit Data Mining Signatures To Data Mining Application
Receive Document List For Each Trade Secret From Data Mining Application
Cross-Reference Documents To Each Trade Secret
Data Mining Interface Process Complete

Fig. 10

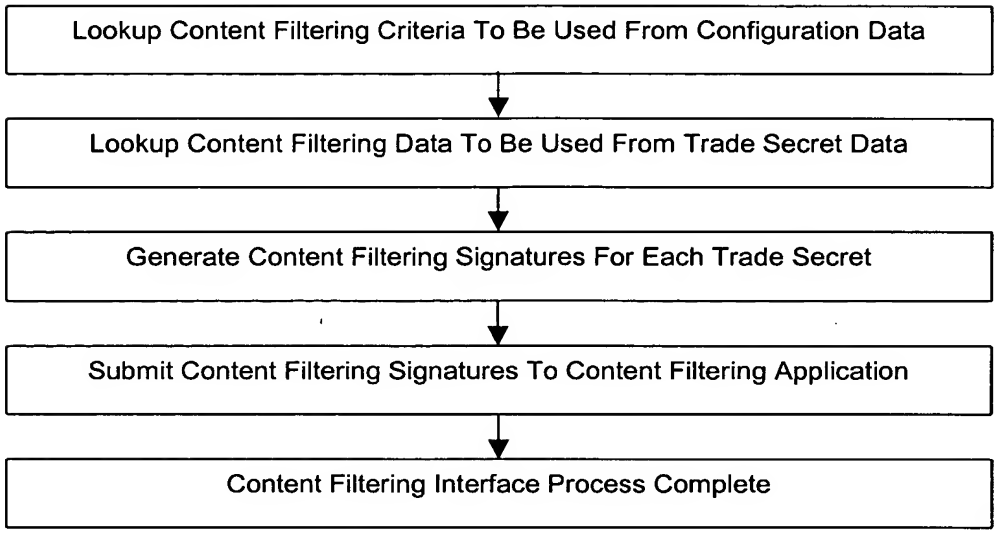

Lookup Content Filtering Criteria To Be Used From Configuration Data
Lookup Content Filtering Data To Be Used From Trade Secret Data
Generate Content Filtering Signatures For Each Trade Secret
Submit Content Filtering Signatures To Content Filtering Application
Content Filtering Interface Process Complete

Fig. 11

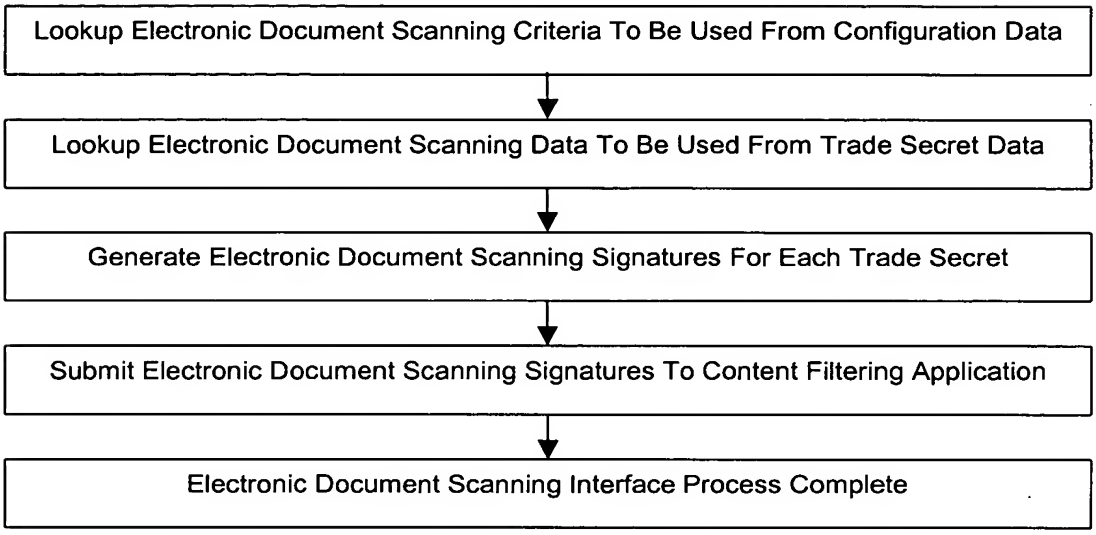
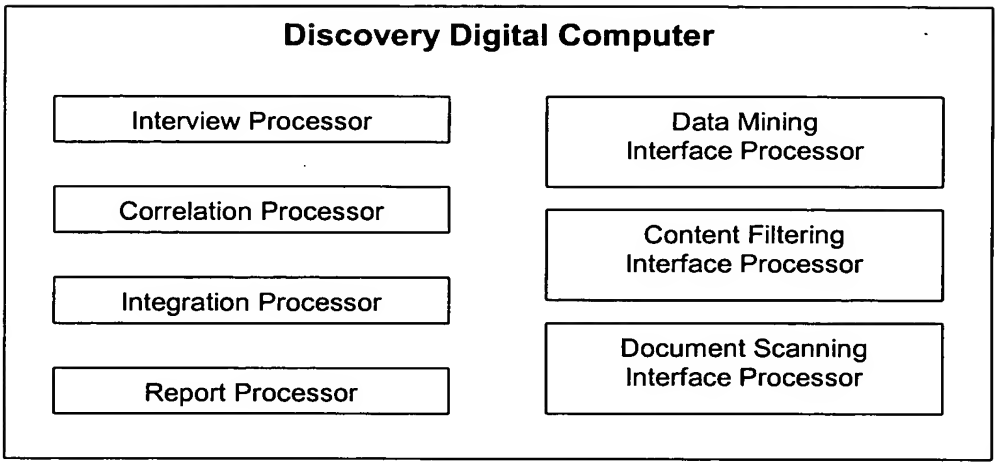

Lookup Electronic Document Scanning Criteria To Be Used From Configuration Data
Lookup Electronic Document Scanning Data To Be Used From Trade Secret Data
Generate Electronic Document Scanning Signatures For Each Trade Secret
Submit Electronic Document Scanning Signatures To Content Filtering Application
Electronic Document Scanning Interface Process Complete

Fig. 12


Discovery Digital Computer
Interview Processor
Correlation Processor
Integration Processor
Report Processor
Data Mining Interface Processor
Content Filtering Interface Processor
Document Scanning Interface Processor